Subject: Whither Object

Posted by MKatz843 on Wed, 09 Apr 2003 22:48:21 GMT

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What is the best way to define a new object variable such that:

- A) if the object class exists, then it is loaded.
- B) if the object class is unknown then we return obj_new() or set a failure flag somehow.

Given an object class name in a string, I'd like to make a flexible definition:

```
a = obj_new("MyClass")
```

Then if there is a myclass__define.pro, we assign the object, otherwise we assign obj_new().

Perhaps I could create a new object-definition function with a success flag, like this

```
a = obj_new2("SchoolOnSaturday", noclass=noclass)
;-- noclass=1 if it failed.
```

To date, I've been using something like this

```
name = "MyClass"
CATCH, Error_Status
```

```
if (Error_status NE 0) then begin print, 'Error_status = ', Error_Status print, 'Error message: ', !ERROR_STATE.MSG print, 'No such class' endif else begin a = obj_new(name) endelse
```

That seems to work a little, but CATCH catches everything and I don't like using it. Another idea is that we could have a new function called obj_test() where

YesItExists = obj_test("MyClass")

Does such a function exist already? Has anyone out there solved this for themselves?

Thanks, M. Katz

Subject: Re: Whither Object

Posted by David Fanning on Thu, 10 Apr 2003 17:39:24 GMT

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M. Katz (MKatz843@onebox.com) writes:

- > Note: there was a slight keyword error in David's post (heaven forfend!).
- > /Include_Current_Directory should be /Include_Current_Dir
- > and the former actually caused an error (IDL 5.6, Mac OS X).

Aaauughhh! RSI is always doing this to me! I think their agenda must include driving anal people to distraction. :-(

One of the most grievous examples of this is the GROUP keyword on XMANAGER. Uh, folks, that is *suppose* to be a GROUP_LEADER!!!!

Cheers,

David

--

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Subject: Re: Whither Object

Posted by MKatz843 on Thu, 10 Apr 2003 22:25:37 GMT

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The solution recommended by James Jay Jones at IDL's tech support is to use obj_class().

I don't think I've ever used obj_class(). There's a first time for everything. Here's the RTFM moment:

Syntax

Result = OBJ_CLASS([Arg] [, COUNT=variable] [, /SUPERCLASS{must specify Arg}])

Return Value

Returns a string containing the name of the class or superclass. If

the supplied argument is not an object, a null string is returned. If no argument is supplied, OBJ_CLASS returns an array containing the names of all known object classes in the current IDL session.

Thanks David and James for your help.

M. Katz

Subject: Re: Whither Object
Posted by MKatz843 on Fri, 11 Apr 2003 16:45:39 GMT
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At the risk of monopolizing my own discussion, here's a function I prepared that does both jobs. It first checks to see if the function has already been compiled. That's good for the runtime distribution where all objects must be precompiled. If that fails, it looks in the directories for the __define.pro file. TRUE (1b) is returned if the class exists. FALSE (0b) is returned if it fails.

```
function obj_test, class
  if (obj_class(class) NE "") $ ;--- already compiled?
    then return, 1b
  ;--- Search for it.
  return, File_Which(StrLowCase(class) + "__define.pro" , $
    /Include_Current_Dir) NE ""
end
```